

## Remarks

Claims 1-6, 19, 22-23, 28, 48, 50, 53, 55 and 57 are rejected under 35 U.S.C. 102(a) as being unpatentable over Brewed et al (U.S. Patent No. 6,711,357) in view of Chen (U.S. Patent No. 6,563,835).

Applicant respectfully traverses the rejection under 35 U.S.C. 103(a).

With respect, the rejection fails to establish a *prima facie* case of obviousness for at least the following reasons:

- 1) neither Brewer or Chen teach or suggest, alone or in combination, the invention as claimed;
- 2) the references fail to teach the limitations attributed to the references; and
- 3) there is no motivation or suggestion to combine the cited references.

Without limiting the generality of the foregoing, neither reference, or any combination teach the highlighted portions of claim 1:

"A system for testing an optical component, said system comprising:  
(a) at least one first module **capable of obtaining a respective first measurement of a characteristic of a spontaneously emitted signal** that is supplied to the optical component;  
(b) at least one second module, wherein each one of said at least one second module is associated to one of said at least one first module, said at least one second module capable of obtaining a respective **second measurement of the characteristic of the spontaneously emitted signal** for which a respective first measurement of the characteristic was obtained by its associated first module, the respective second measurement being obtained upon reception of the spontaneously emitted signal from the optical component;  
(c) a **processing module** in communication with said at least one first module and said at least one second module **for determining a feature of the optical component based on the first and second measurements.**"

In the official action, the rejection is based on the assertion that Figures 1 and 12 (and in particular, ingress side line 101 in conjunction with 1202, 1201, 19 and 105, satisfies limitation

(a). With respect, neither figure 1, or figure 12, or the related description, teaches or suggests this limitation, nor is this limitation taught or suggested elsewhere by Brewer. In particular, receiver 1201 of 101 does not obtain, nor does 105 transmit, a **first measurement** of a characteristic of a **spontaneously emitted signal**. Brewer does not provide any details of receiver 1201, and there is no reason to assume receiver 1201 does anything apart from receiving the signal transmitted by 105.

The reference simply fails to teach or suggest making any measurement of a characteristic of a spontaneously emitted signal. In particular the reference does not teach or suggest obtaining a first measurement of a characteristic of a signal transmitted by transmitter 1202 of figure 12, let alone where such a signal is a spontaneously emitted signal. 1202 does not send a spontaneously emitted signal.

Furthermore, with respect to claim element (b), the rejection, as best understood, is based on the assertion that the egress side line 104, and in particular SOF detect 1302-1 is capable of obtaining a respective second measurement of the characteristic of the spontaneously emitted signal. With respect, neither figure 1, or figure 12, or the related description, teaches or suggests this limitation, nor is this limitation taught or suggested elsewhere by Brewer. In particular, SOF detect 1302-1 does not obtain, any measurement of a characteristic of a spontaneously emitted signal - let alone a second measurement as claimed.

SOF detect 1320-1 detects the SOF - start of frame - which is not a measurement of a characteristic a signal. SOF relates to the start of a frame of bits of data carried in a signal. Not only is a SOF not a measurement or characteristic of a signal, but this further demonstrates that this is not a spontaneously emitted signal. A **spontaneously emitted signal** would not carry data.

Furthermore, Chen does not teach or suggest claim element (c). Chen describes a call processing arrangement for an ATM switch, and is simply irrelevant to the present invention. Chen in general, and figure 6 in particular, describes an ATM switch architecture, not an optical switch (see col. 7 line 59 (discussing Fig 5) and col. 8, lines 11-12 (which states Fig 6 is a functional viewpoint of Fig 5). Switch fabric 510 is an ATM fabric, for both figures, and is not an optical component, nor is there any optical component. Furthermore, Chen's switch

control module does not determine a feature of the optical component (even if there was one) based on the first and second measurements. Chen makes no teachings or suggestions regarding a feature of an optical component, nor of first and second measurements. Chen's module 501 was used to perform processing tasks for an atm switch - See col 8 lines 5-11. Furthermore, the cited passage col 8, lines 25 - 45 simply discusses call processing, and does not teach or suggest the claim limitation.

Accordingly, neither Brewer or Chen teach or suggest, alone or in combination, the invention as claimed, and the rejection is deficient as the references fail to teach the limitations attributed to the references.

For the Examiner to establish a *prima facie* case of obviousness, three criteria must be considered: (1) there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine the reference teachings, (2) there must be a reasonable expectation of success, and (3) the prior art references must teach or suggest all of the claim limitations. MPEP §§ 706.02(j), 2142 (8th ed.).

For the Patent Office to combine references in an obviousness analysis, the Patent Office must do two things. First, the Patent Office must articulate a motivation to combine the references, and second, the Patent Office must support the articulated motivation with actual evidence. *In re Dembiczak*, 175 F.3d 994,999 (Fed. Cir. 1999). While the range of sources for the motivation is broad, the range of available sources does not diminish the requirement for actual evidence. *Id.*

In his rejection, the Examiner states: "It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify system of Brewer et al with a processing module in communication with said at least one first module and said at least one second module for determining a feature the optical component based on the first and second measurements as taught by Chen for the purpose of controlling degree of processing power distribution as distributed signaling architecture, or routing architecture." The stated purpose does not provide a motivation to combine the references, and is irrelevant to the present invention, which describes and teaches a system for testing an optical component.

The Examiner makes this assertion based on the subject matter of the present application without providing a motivation or suggestion to combine the cited references.

With respect, there is no motivation or suggestion to combine these references, apart from forbidden hindsight analysis based on the present application.

In order to prevent hindsight analysis, there must be some motivation or suggestion to combine specific prior art in such a way as to arrive to the combination disclosed in the patent at issue. See, e.g., Yamanouchi Pharmaceutical Co., Ltd. v. Danbury Pharmacal, Inc., 231 F.3d 1339, 1343 (Fed. Cir. 2000): *"the suggestion to combine requirement stands as a critical safeguard against hindsight analysis and rote application of the legal test of obviousness."*, and Ecolochrom, Inc. v. Southern California Edison Co., 227 F.3d at 1371-1372 (Fed. Cir. 2000), *"Combining prior art references without evidence or a suggestion, teaching, or motivation simply takes the inventor's disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight."*

Accordingly, it is respectfully submitted that the rejection fails to establish a prima facie case of obviousness, by failing to provide and support a motivation to combine the cited references to support the rejection.

In any event, as demonstrated above, even if the references could be combined, any such combination does not teach the claimed invention.

Accordingly, the rejections fail to establish a prima facie case of obviousness, and withdrawal of the rejections are requested.

Claims 7, 13, 24-27, 34, 40-47, 49, 51-52, and 54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Brewer et al in view of Chen as applied to claims 1-3, 19-21, and 48 above, and further in view of Alvarez et al (U.S. Patent No. 6,731,832).

Once again, these rejections fail to establish a prima facie case of obviousness.

In support of this rejection, the examiner adds a 3<sup>rd</sup> prior art reference. Once again, there is no there is no motivation or suggestion to combine these references, apart from forbidden

hindsight analysis based on the present application. The stated purpose here is to improve technology in the communication of data. With respect, stating that the purpose is to improve optical networks does not provide a motivation to combine these references, and the examiner is clearly using forbidden hindsight.

Furthermore, even if these references could be combined (which is not admitted and denied), they do not teach the claimed invention. The rejection relies on col 5, lines 50-60. We reproduce lines 50-62 below.

The Node Manager 250 also continuously monitors switch and network status such that fault conditions can be detected, isolated, and repaired. The OPM 260 may be used in this regard to detect a loss of signal or poor quality signal, or to measure signal parameters such as power, at any of the line cards using appropriate optical taps and processing circuitry. Three levels of fault recovery may be supported: (1) Component Switchover--replacement of failed switch components with backup, (2) Line Protection--rerouting of all light paths around a failed link; and (3) Path Protection--rerouting of individual light paths affected by a link or node failure.

This passage, discusses measuring signal parameters at a line card to determine whether there is a network fault (items (2) and (3) from an incoming signal (not a spontaneously emitted signal as claimed) to determine whether protection switch (rerouting of light paths) is required. This is simply not relevant. With respect to item (1), component switchover, there is no teaching or suggestion of determining a feature of the optical component based on the first and second measurements as claimed. Alvarez does not teach or suggest the measuring of a spontaneous emission signal, nor that spontaneous emission can be used as a test-able signal.

Accordingly, even if all 3 references can be combined (which is once again denied), they fail to teach the claimed invention, and the rejections fail to establish a *prima facie* case of obviousness, and should be withdrawn.

Similar comments apply to the remaining rejections and withdrawal of all the rejections and allowance of the application is hereby requested.

Appln. no. 10/797,071  
Response dated July 20, 2006  
Office Action dated April 20, 2006

No fee is believed due for this submission. However, Applicant authorizes the Commissioner to debit any required fee from Deposit Account No. 501593, in the name of Borden Ladner Gervais LLP. The Commissioner is further authorized to debit any additional amount required, and to credit any overpayment to the above-noted deposit account.

Respectfully submitted,

**GOODWILL, Dominic et al**

By: 

**Jeffrey Measures**

Reg. No. 40,272  
Borden Ladner Gervais LLP  
World Exchange Plaza  
100 Queen Street, Suite 1100  
Ottawa, ON K1P 1J9  
CANADA  
Tel: (613) 237-5160  
Fax: (613) 787-3558  
E-mail: [ipinfo@blgcanada.com](mailto:ipinfo@blgcanada.com)

JMM/dbm